aration of nails occurring simultaneously or following a photosensitivity skin eruption. Photo-onycholysis usually involves fingernails, but may also involve sun-exposed toenails.

Superficial acneiform pustules may also be induced by tetracycline, apparently due to bacterial suppression and consequent overgrowth of the lipophilic yeast, Pityrosporum orbiculare, around hair follicles.

VICTOR S. CONSTANTINE, M.D.

REFERENCES

Tarnowski WM: Fixed-drug eruption due to tetracycline. Arch Dermatol 102:234, 1970

Savin JA: Current causes of fixed drug eruptions. Br J Dermatol 83:546-549, 1970

Csouka GW, Rosedale N, Walkden L: Balanitis due to fixed drug eruptions associated with tetracycline therapy. Br J Vener Dis 47:42-44, 1971

Frank SB, Cohen HJ, Minkin W: Photo-onycholysis due to tetracycline hydrochloride and doxycycline. Arch Dermatol 103:520-521, 1971

Frost P, Weinstein GD, Gomez EC: Methacycline and demeclocycline in relation to sunlight. JAMA 216:326-329, 1971

Weary PE, Russell CM, Butler HK: Acneiform eruption resulting from antibiotic administration. Arch Dermatol 100:179-183, 1969

Sunscreens

THE IDEAL SUNSCREEN SHOULD protect against light rays of wavelengths between 2900 and 4250 Angstroms. These include short ultraviolet "sunburning" rays (2900 - 3200 Å), long ultraviolet rays (3200 - 4000 Å), and near visible rays (4000 - 4250 Å). Long ultraviolet and near visible rays not only enhance sunburn and certain inherited photosensitivity diseases, but are the primary activating rays in most acquired photosensitivity diseases.

The sunscreen that presently seems most effective for protection against short ultraviolet light is a mixture of para-aminobenzoic acid (PABA) and alcohol. It gives a sustained high degree of protection and is non-toxic, stable, and cosmetically elegant. Other popular commercial agents either fail to provide significant protection or cause undesirable toxic effects.

Protection against long ultraviolet and near visible rays requires use of broader range sunscreens such as benzophenone, red veterinary petrolatum, titanium oxide or zinc oxide. However, repeated frequent application of these agents is necessary for sustained protection.

ISAAC WILLIS, M.D.

REFERENCES

Willis I: Sunlight and the skin. JAMA 217: 1088-1093, 1971

Willis I, Kligman AM: Aminobenzoic acid and its esters: The quest for more effective sunscreens. Arch Dermatol 102:405-417, 1970

Pathak MA, Fitzpatrick TB, Frenk E: Evaluation of topical agents that prevent sunburn: The superiority of PABA and its ester in ethyl alcohol. N Engl J Med 280:1459-1463, 1969

Wilson WW, Quero R, Master KJ: The search for a practical sunscreen. South Med J 59:1425-1430, 1966

Katz SI: Relative effectiveness of selected sunscreens. Arch Dermatol 101:466-468, 1970

Blank H: Immediate cutaneous reaction to a sunscreen. Arch Dermatol 103:461, 1971

Dermatophyte Test Medium

DERMATOPHYTE TEST MEDIUM (DTM) is a new fungus culture agar which enables the non-mycologist to easily grow and recognize griseofulvin-sensitive superficial fungi which infect skin. The medium contains phenol red indicator which changes from yellow to red when exposed to alkaline metabolites produced by dermatophyte fungi. It also contains cyclohexamide, gentamicin sulfate, and chlortetracycline HCl to reduce growth of contaminant yeasts, bacteria and saprophytic fungi.

The initial enthusiastic reports about use of DTM have been followed by the realization that it is not as reliable as Sabouraud's antibiotic agar for isolation of monilia and dermatophyte fungi. However, DTM provides a useful screening test and will hopefully encourage the busy practitioner to do cultures of suspected cutaneous fungal infections.

PAUL H. JACOBS, M.D.

REFERENCES

Taplin D, Zaias N, Rebell G, et al: Isolation and recognition of dermatophytes on a new medium (DTM). Arch Dermatol 99:203-209, 1969

Allen AM, Drewry RA, Weaver RE: Evaluation of two new color indicator media for diagnosis of dermatophytosis. Arch Dermatol 102:68-70, 1970

Merz WG, Berger CL, Silva-Hutner M: Media with pH indicators for the isolation of dermatophytes. Arch Dermatol 102:545-547, 1970

Rosenthal SA, Furnari D: Efficacy of Dermatophyte Test Medium. Arch Dermatol 104:486-489, 1971

Topical Urea

UREA IS A NONTOXIC, nonallergenic substance which increases water-binding capacity of stratum corneum, yielding softness and pliability of

treated skin. Ichthyosis vulgaris and dry, elderly skin respond favorably with 10 percent to 20 percent urea in a vanishing cream base. Added to steroid cream in the same percentages, urea may help atopic dermatitis. Its antipruritic effect makes urea conforting for itchy psoriasis and early mycosis fungoides.

Urea in 30 percent to 40 percent concentrations is strongly keratolytic. Hyperkeratotic fissured palms and soles may benefit from either 40 percent urea in vanishing cream base or 30 percent aqueous urea soaks. Proteolytic debridement of leg ulcers, necrotic malignancies, and infected wounds will occur with aqueous compresses of 40 percent urea applied for thirty minutes four times daily. Rapid deodorization of such lesions results from the antibacterial properties of urea.

Commercial urea preparations currently include Carmol® cream and Aquacare® Dry Skin Cream and Lotion.

E. DORINDA LOEFFEL, M.D.

REFERENCES

Swanbeck G: A new treatment of ichthyosis and other hyperkeratotic conditions. Acta Derm Venereol 48: 123-127, 1968

Stewart WD, Danto JL, Maddin WS: Urea cream. Cutis 5: 1241-1242, 1969

Nash DP: Urea cream for dry skin. J Am Podiatry Assoc 61: 382-384, 1971

Hindson TC: Urea in the topical treatment of atopic eczema. Arch Dermatol 104:284-285, 1971

Swanbeck G, Rajka G: Antipruritic effect of urea solutions. Acta Dermatovener. 50:225-227, 1970

Fligman AM: Dermatologic uses of urea. Acta Derma Venereol 37:155-159, 1957

Staphylococcal Scalded Skin Syndrome

THE SCALDED SKIN SYNDROME is a frightening condition in which skin turns red and slides off in sheets, leaving large denuded areas. The infantile and childhood form of this is now seen to be part of a spectrum of clinical entities caused by Staphylococcus aureus, phage group II, type 55/71.

Included are Ritter's disease of the newborn, the childhood type of Lyell's disease (toxic epidermal necrolysis), staphylococcal scarlet fever, and bullous impetigo.

Bullous impetigo is a localized form of this syndrome whereas the staphylococcal scarlet fever, which presents with the scarlatiniform eruption but lacks the tonsillitis or exanthem of streptococcal scarlet fever, is a mild form of the syndrome which does not progress to skin separation.

The toxic epidermal necrolysis (Lyell's disease) of the adult type is a more severe, potentially fatal disease not related to staphylococcus infection, but rather is a toxic reaction to several types of drugs. In this disorder, the skin separation is subepidermal.

An animal model is now available for study of the staphylococcal syndrome.

Newborn mice infected with phage group II staphylococci or injected with cell-free filtrates of the same organism will develop typical epidermal necrolysis.

The exfoliative toxin has been identified and partially purified.

Methicillin is the treatment of choice for staphylococcal scalded skin syndrome, leading to rapid recovery within a few days. Corticosteroids are contraindicated, except in the adult toxic epidermal necrolysis.

ALVIN H. JACOBS, M.D.

REFERENCES

Lyell A: Toxic epidermal necrolysis: An eruption resembling scalding of the skin. Br J Dermatol 68:355, 1956

Lowney ED, Baublis JV, Kreye GM, et al: The scalded skin syndrome in small children. Arch Dermatol 95:359, 1967

Koblenzer PJ: Acute epidermal necrolysis (Ritter von Rittershain-Lyell). Arch Dermatol 95:608, 1967

Melish ME, Glasgow LA: Staphylococcal scalded skin syndrome: The expanded clinical syndrome. J Pediatr 78:958, 1971

Melish ME, Glasgow LA: Staphylococcal scalded skin syndrome: Development of an experimental model. N Engl J Med 282:1114, 1970

Melish ME, Glasgow LA, Turner MD: The staphylococcal scalded skin syndrome: Isolation and partial characterization of the exfoliative toxin. J Infect Dis 125:129, 1972

Arbuthnott JP, Kent J, Lyell A, et al: Toxic epidermal necrolysis produced by an extracellular product of staphylococcus aureus. Br J Dermatol 85:145, 1971

Phenolic Depigmentation of Skin

DEPIGMENTATION OF SKIN RESEMBLING vitiligo may be caused by certain phenolic compounds. In addition to hydroquinone and its monobenzyl ether, several other phenolics are now being recognized as causing depigmentation.

Patchy depigmentation of hands and forearms has been described in hospital employees working with phenolic germicidal solutions containing p-tert-butylphenol, p-tert-amylphenol, and p-tert-butylcatechol. Similar depigmentation has occurred in auto factory workers exposed to